



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/850,202	05/07/2001	Peter Phaal	21906-0703	9730

7590

01/10/2005

David Beck  
Bingham McCutchen LLP  
3 Embarcadero Center  
Suite 1800  
San Francisco, CA 94111

EXAMINER

LIEN, TAN

ART UNIT

PAPER NUMBER

2141

DATE MAILED: 01/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/850,202	<b>Applicant(s)</b> PHAAL, PETER	
	<b>Examiner</b> Tan Lien	<b>Art Unit</b> 2141	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 27 September 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) 20-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 and 26-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

Claims 1-19 and 26-32 are presented for examination.

Claims 1-19 and 26-27 are currently amended.

Claims 20-25 are cancelled.

Claims 28-32 are newly added.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-19, and 26-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bruins et al (US Patent 6,308,148) in view of Merriam (US Patent 6,587,878).

Claim(s) 1, 10, 19, 28: Bruins teaches a method to monitor a network by a network monitor, comprising:

receiving data packet flow records from at least one network router (col. 2, lines 23-24; wherein the router is collecting flow information to be used);

filtering said flow records (col. 2, lines 36-40); and

extracting packet information from said filtered flow records (col. 3, lines 66-67) or from at least a fraction of said received flow records (col. 2, lines 35-45; wherein the fraction of said received flow records is the subset of total set of flows), wherein said extracted packet information comprises information of at least one target of interest (col. 4, lines 9-17; wherein the target of interest is the selected range of source addresses that originate from the internet domain "cisco.com" or in the second case, the target of interest is the selected protocol type such as the "FTP" protocol).

Bruins, however, does not explicitly teach performing active measurements of said at least one target of interest based on said extracted packet information. Bruins does, however, suggest adjusting features or parameters based on aggregated flow information of the network to improve performance (Abstract of Bruins, next to last sentence & Claim 5 of Bruins).

Marriam, in an analogous art, teaches a performance measurement program to measure actual performance data (col. 5, lines 29-31 and col. 9, lines 45-50). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Bruins' method of extracting packet information from the filtered flow records with Marriam's performance measurement program to measure actual performance data extracted from the filter. One of ordinary skill

Art Unit: 2141

in the art would recognized that the combination of exporting Bruin's network flow data with Marriam's performance measurement program would produce an advantage of improving the network performance or make the network perform more efficiently (Abstract of Bruins, next to last sentence & Claim 5 of Bruins).

Claim(s) 2, 11: Bruins and Marriam teach the method according to claim 1, 10, said filtering step comprising:

selecting flow records based on packet routing information in said received flow records (col. 2, lines 24-25 Bruins).

Claim(s) 3, 12: Bruins and Marriam teach the method according to claim 2, 11, said filtering comprising

selecting flow records having non-local destination or source addresses (col. 3, lines 21-23 Bruins; wherein the destination are host from the "internet" which implies non-local and local hosts. It is well known in the art that a method can filter flow records that have source and/or destination host from a local subnet or other subnets).

Claim(s) 4, 13: Bruins and Marriam teach the method according to claim 2, 11, said filtering comprising

selecting flow records having local destination or source addresses (col. 3, lines 21-23 Bruins; wherein the destination are host from the "internet" which implies

Art Unit: 2141

non-local and local hosts. It is well known in the art that a method can filter flow records that have source and/or destination host from a local subnet or other subnets).

Claim(s) 5, 14: Bruins and Marriam teach the method according to claim 2, 11, said filtering step comprising:

selecting flow records having destination or source addresses associated with performing critical services (col. 2, lines 28-32 and col. 3, lines 25-39 Bruins; wherein the critical servers are file transfer, electronic mail, and http services).

Claim(s) 6, 15: Bruins and Marriam teach the method according to claim 1, 10, said filtering step comprising:

randomly selecting flow records from said received flow records (col. 2, lines 36-38; wherein each filter randomly selects only a subset of the total flows).

Claim(s) 7, 8, 16, 17, 26, 27: Bruins and Marriam teach the method according to claim 1, 10, 19,

said active measurement comprise a ping and a traceroute process (Official Notice is taken of active measurement comprise ping and traceroute process. It is well known in the art at the time of the invention to use these processes in active measurement of network performance. It is also state in Marriam in col. 1, lines 60-61).

Claim(s) 9, 18: Bruins and Marriam teach the method according to claim 1, 10, further comprising

selecting the nature of said active measurements based on said target of interest (col. 5, lines 29-31 and col. 9, lines 45-50 and FIG. 1, ref. Server probe and remote probes of Marriam).

Claim(s) 29, 30, 31, 32: Bruins and Marriam teach the method according to claim 1, 10, 19, 28 further comprising:

routing said data packets through said at least one router (col. 2, lines 20-21 Bruins; wherein the function of a router is to route data packets through its interfaces); and

generating said data packet flow records (col. 2, lines 23-24 Bruins; wherein the router is collecting or generating flow information to be used. Flow information are information about data packets).

### ***Response to Amendment***

Applicant's arguments filed 9/27/2004 have been fully considered but they are not persuasive.

In the Remarks, Applicant argued that

(a) the Examiner has improperly combined the teachings of Bruins and Merriam and that there is no suggestion or motivation in combining the references and that the Examiner uses impermissible hindsight to combine.

As to point (a), the Examiner is aware of the impermissible hindsight suggestions or motivations to combine. The Examiner is not just stating that the suggestion or motivation to combine is to improve the efficiency of the network, but the Examiner also pointed out that the suggestion or motivation to combine Bruins' method of extracting packet information from the filtered flow records with Marriam's performance measurement program to measure actual performance data extracted from the filter is in the Abstract of Bruins (next to last sentence & Claim 5 of Bruins). After reading the citation, one of ordinary skill in the art at the time of the invention would recognize that when adjusting the network performance parameters of the network, one would try to improve its efficiency in terms of performance, and not try to degrade its performance nor adjusting the performance parameters just for the sake of adjusting. The Examiner has rewritten the suggestion or motivation to combine so that the Applicant can have a better view of where the suggestion or motivation is coming from. So, the Examiner is not just merely stating the obvious suggestion or motivation to combine, but also pointed out in the prior art which emphatically and clearly states it.



(b) Bruins is focused on providing an improved system for analyzing large amount of data packet flow data, whereas Merriam is focused on providing an improved system for performing active tests on network devices, and that there is no suggestion in Bruins and Merriam to provide a system that performs both of these functions.

As to point (b), Bruins is focused on providing an improved system for analyzing large amount of flow data and the flow data contain source and destination address, and also layer 4 services encompassing file transfer, electronic mail, and http services (col. 2, lines 28-32 and col. 3, lines 25-39 Bruins; wherein the servers are file transfer, electronic mail, and http services). Merriam is focused on providing an improved system for performing active test on network devices (as the Applicant stated) that host web and http services to test for its connectivity and efficiency. With a suggestion that Bruins is collecting flow data containing layer 4 services including web and http services and Merriam is performing active test on network devices hosting web and http services, there is a strong tie and motivation to combine.

With a strong motivation and suggestion to combine, the 103 rejection stands.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Tan Lien whose telephone number is (703) 305-6018. The examiner can normally be reached on Monday-Thursday from 8:30am to 6pm. The examiner can also be reached on alternate Fridays.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharja, can be reached at (703) 305-4003. The fax phone number for this Group is (703) 305-3718.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [tan.lien@uspto.gov].

Art Unit: 2141

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.



**RUPAL DHARIA**  
SUPERVISORY PATENT EXAMINER